Danner, Ward

From: Wilson, Patrick
Sent: Tuesday, December 17, 2013 5:02 PM
To: Zander, Maia
Cc: Armann, Steve; Mogharabi, Nahal; Huetteman, Tom; Lyon, Sandra
Subject: RE: PCB question about Malibu High School

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Good Afternoon Dr. Zander,

It was a pleasure speaking with you this afternoon regarding the results of the limited & preliminary PCB testing at Malibu High School. As we discussed, there has been plenty of confusion between the regulatory triggers for PCBs found in the Toxic Substances Control Act (TSCA) & the EPA's health or risk-based concentrations for air, water or impacted soils that we consider to be safe – or without appreciable long-term harm.

As we discussed, polychlorinated biphenyls or PCBs are regulated under TSCA. Unlike many federal environmental regulations, TSCA is not delegated to our state partners. Under TSCA, concentrations of impacted caulk or other building materials equal to or above 50 ppm is considered an unauthorized use (there are limited & specific exemptions spelled out in the law). Because some of the Malibu HS caulk samples were analyzed & found to have PCB concentrations in excess of this regulatory trigger concentration (50 ppm), it is now considered an unauthorized use & subject to regulation by TSCA.

We cannot emphasize enough that the 50 ppm regulatory trigger is not a health or risk-based standard nor guideline. That is to say, the 50 ppm concentration is not directly nor indirectly related to PCBs ability to elicit disease in humans.

As an Agency, EPA applies health or risk-based approaches to determine the amount or concentration of PCBs that are safe, or that are without appreciable long-term harm in air, water & soils. Air, water, soils & impacted foods are the primary routes by which individuals are exposed to elevated levels of PCBs in the US.

We realize that exposure to a contaminant or chemical is necessary before the contaminant can induce illness. We also realize that the higher the levels of exposure from impacted air, water, soils or foods – the greater the risk – or the greater the likelihood of developing an illness which has been associated with that contaminant.

Elevated exposures can generally occur in two fashions – acute exposure or high levels for short windows of time - & chronic exposures or trace levels for long windows of time. Based upon the limited & preliminary data shared with us to date, your situation falls into the chronic exposure category.

We have compared the max concentration found in any air sample from Malibu HS to EPA's health or risk-based guidelines. The site-specific guideline developed for NY City schools in conjunction with our Region II office is 0.2 ug/m3. The max PCB sample found in air at Malibu is 0.06 ugPCB/m3 air. The max concentration found in the air is roughly a factor of 10 or an order of magnitude below this guideline – and from that perspective the levels of PCBs found in the air have not been associated with illness or the ability to elicit illness.

We also compared the max concentration found in any air sample with EPA's Regional Screening Levels (RSLs) for a residential exposure scenario. As we discussed 0.0043 ugPCB/m3 of air to 0.43 ugPCB/m3 is our "acceptable risk range" for PCB exposures in residential air – and those airborne concentrations are roughly equivalent to a lifetime excess

cancer risk (or likelihood) of 1 in a million to 100 in a million. The max concentration found at Malibu HS (0.06) is roughly equivalent to a 10 in a million excess risk of developing cancer assuming a 30-year duration of practically continuous exposure.

Again, when we compare the max concentration found (rather than the more typical average concentration) with our "acceptable risk range" we find that the levels identified in air are consistent with the levels specified in this range.

Steve Armann has spoken with the Superintendent's office about the potential to conduct near-term cleaning of rooms found with dust impacted by PCBs. Some of the dust samples had elevated levels of PCBs – and they should be remediated to reduce the exposure hazard. There were no airborne samples identified in this very preliminary sampling event to convince the Agency that the air was not safe to breathe based upon the concentrations of PCBs found to date.

It is my understanding that the school district will enter into an enforceable agreement with the Agency to remove impacted caulk, to re-test the air in continuing to ensure its safety, and to institute "Best Management Practices" to clean & remove impacted dust found on the surface of some buildings & rooms.

I hope this is useful Dr. Zander, please don't hesitate to contact me directly if we can offer additional clarification.

Best Regards…

..patrick

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United States Environmental Protection Agency

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From: Zander, Maia [mailto:mzander@smmusd.org]
Sent: Tuesday, December 17, 2013 12:58 PM
To: Wilson, Patrick
Subject: PCB question about Malibu High School

Hi Dr. Wilson,

Thank you SO much for coming to Malibu High School last week and talking to us. You were able to really clarify a lot of things for us!

I have a question for you, and I completely understand if you are not able to answer them for me. I am trying to convey some of what you said to my parents, and I am wondering if I could get anything from you in writing. The two things you said that really resonated with me were:

1. The distinction between regulatory concerns and health concerns--you made a clear distinction between the two and said that there was a far greater regulatory concern here than there was a health concern. From the levels of PCBs you have seen in our testing (which was not done by you), you said that the probability of getting sick was so low that it was considered theoretical. If you could explain that to me in a message that you would be comfortable with me sharing to my students and parents, I would really appreciate it.

2. This one might be more problematic for you, so I understand if you can't say anything about this… My classes have been moved from a windowless room with new flooring and paint (although it has NOT been tested for PCBs) into the

library, where there were the highest levels of PCBs found in the wipe samples. In your opinion, is there any scientific reason for this decision?

I am trying to send a message out to my families tonight, so if you have time to get back to me ASAP, I would really appreciate it. Of course, if you aren't comfortable giving me a written statement about these two points, I will completely understand. I don't want to get you into any trouble!

Thanks again for everything you have done for us!
:)Maia

Dr. Maia Zander
Malibu High School Orchestras